U.S. Environmental Protection Agency
Science Advisory Board
Katrina Soil and Sediment Sampling Plan Workgroup

Ivan J. Fernandez

Dr. Fernandez is a professor and forest soils scientist at the University of Maine, Orono. He chairs the Department of Plant, Soil, and Environmental Sciences. His expertise is in nutrient and metal cycling in forested ecosystems, particularly in soil biogeochemical responses to ecosystem disturbance. He publishes regularly in professional journals on a multi-media range of subjects pertaining to forest ecology including soil biogeochemistry, fire ecology, nutrient cycling in soil and water, watershed processes and soil microbial ecology. He has also published numerous technical reports, book chapters, and a book. He is a member of numerous professional organizations such as the Society of American Foresters, Soil Science Society of America, National Association of Environmental Professionals and the Soil and Water Conservation Society to name a few. He serves as a member of the national Council of Soil Science Examiners, the Maine Board of Certification for Professional Geologists and Soil Scienctists, and is responsible for oversight of the long-term whole ecosystem research program at the Bear Brook Watershed in Maine. His research interests are in atmospheric deposition and climate change effects on forested ecosystems and watershed processes, as well as the ecological impact of residuals utilization in forests. Current research projects include studies of long-term watershed acidification, base cation depletion, nitrogen saturation, municipal residuals utilization in forests, and the effects of fire and climate on mercury and nitrogen dynamics. His advanced degrees are in soil chemistry and forest resources from the University of Maine.

Jeffrey Griffiths

Dr. Jeffrey Griffiths is currently Director of the Graduate Programs in Public Health, Tufts University School of Medicine. Associate Professor of Family Medicine and Community Health, Medicine, and Biomedical Sciences, Tufts University Schools of Medicine and Veterinary Medicine; Associate Physician, Division of Geographic Medicine and Infectious Diseases, New England Medical Center; Physician, Department of Infectious Diseases, St. Elizabeth's Medical Center, and Consulting Physician, Divisions of Infectious Diseases, Carney Hospital and Quincy Hospital. Dr. Griffiths received is AB in Chemistry in 1977 from Harvard College and a MD from Albert Einstein College of Medicine in 1982. He received a MPH and TM in Tropical Medicine from Tulane University in 1982. Internships occurred at Yale-New Haven Hospital, 1982-84 in Internal Medicine and Pediatrics; Research Fellow in Tropical Public Health at Harvard School of Public Health in 1986-88; Research and Clinical Fellow at Tufts-New England Medical Center from 1988-91 in Geographic Medicine and Infectious Disease; National Board of Medical Examiners certification in 1984. He received a Connecticut Licensure in Medicine, 1985; Massachusetts Licensure in Medicine, 1986; Diplomate, American Board of Internal Medicine (ABIM), 1987; Diplomate, American Board of Pediatrics, 1987; Govt. of Bangladesh Licensure in Medicine, 1989; Diplomate, Sub-specialty Board in Infectious Diseases, ABIM, 1992; and Certificate of Knowledge in Clinical Tropical Medicine and Travelers' Health, 2000. National Committees or Advisory Groups: Member, National Academies' Committee on Drinking Water Contaminants (1999-2001); Member, Public Interest Advisory Forum, American Water Works Association (1999-2001), Public Health Subgroup; Member, National Drinking Water Advisory Council of the EPA (1998-2000; 2001-2003); Federal representative for the National Association of People with AIDS (NAPWA) to the EPA Drinking Water Microbial Disinfection and Byproducts Committee, 1997-current; Member, AIDS Clinical Trials Group (ACTG) Focus Group on Enteric Pathogens, 1998-; Member, AIDS Clinical Trials Group (ACTG) Focus Group on Microsporidiosis and Cryptosporidiosis, 1996-1998; Consultant to ACTG 336, A Phase II/III Placebo-controlled study of Nitazoxanide (NTZ) for persons with AIDS and Cryptosporidiosis. Other Research & Professional Experience: Director of Microbiology and Serology, St. Elizabeth's Medical Center, 1991-1997; Director, Traveler's Clinic, St. Elizabeth's Medical Center, 1991-1997; Consultant, the Applied Diarrheal Diseases Project, Harvard Institute of International Development, 1991-94; represented USAID to the government of Ecuador during the cholera outbreak; experience in Ecuador and Central America; Field work at the International Centre for Diarrheal Diseases Research in Dhaka, Bangladesh 1988-89; Fellow in Tropical Nutrition, Tulane Univ. School of Public Health and Tropical Medicine, New Orleans, LA. July 1981-June 1982; Field work on the north coast of Haiti, 1981.

Thomas W. La Point

Dr. Thomas La Point directs the Institute of Applied Sciences at the University of North Texas and is a Professor in the Department of Biological Sciences. He received his Ph.D. from the Department of Biological Sciences at Idaho State University in Aquatic Biology. His primary research and teaching interests include contaminant effects on freshwater aquatic communities, specifically how metals and organic contaminants affect benthic population dynamics and freshwater fisheries. He has published on ecosystem measures, contaminant bioaccumulation, and sub-lethal effects on aquatic populations. Dr. La Point has served on several USEPA Science Advisory panels concerned with pesticides and ecological risk and has worked as a consultant on Superfund issues at large sites. Dr. La Point is presently serving on a National Academy of Science NRC Committee on Superfund Site Assessment and Remediation in the Coeur d'Alene River Basin. He is serving as Chair of a Water Environment Research Foundation subcommittee on whole-effluent testing as an indicator of aquatic health. He has served on several NSF, USEPA and USGS panels to review proposals submitted for funding. He is on the editorial board for Chemosphere and Environmental Toxicology and Pharmacology and has served as Editor of the Society of Environmental Toxicology and Chemistry (SETAC) Special Publication Series.

Samuel N. Luoma

Dr. Samuel N. Luoma is a Senior Research Hydrologist with the US Geological Survey and served as the first Lead Scientist for the CALFED Bay-Delta program between August 2000 and November 2003. As Lead Scientist he helped establish peer review, approaches to using scientific experts as advisors, a broad system of new studies relevant to CALFED, and improved the credibility and clarity of the science CALFED uses in its decisions. He is broadly interested in California water issues, ecosystem restoration and in improving uses of science in water policy decisions. His research interests include the effects of pollutants in aquatic environments, with special emphasis on metals. The studies he and his project have conducted are available in leading publications and recognized as among the leaders in fields such as metal bioavailability, dietary exposure of aquatic organisms to metals, determination of metal effects at the individual, population and community level in field studies; evaluation of methods like AVS/SEM for their useful in regulatory arenas; tolerance of aquatic organisms to metals and fundamental aspects of metal effects in nature. He has worked in San Francisco Bay since 1974 and has authored more than 180 peer-reviewed publications. He wrote the textbook, Introduction to Environmental Issues, in 1984. He was editor of Marine Environmental Research from 1996 – 2003 and is an editorial advisor for the Marine Ecology Progress Series. He is a Fellow in the American Association for the Advancement of Science and was awarded the U. S. Department of Interior's Distinguished Service Award in 1986. He has participated nationally and internationally as an expert or advisor, including advising the USEPA's Science Advisory Board on sediment quality criteria and the NAS/National Research Council's Committee on the Bioavailability of Contaminants in Soils and Sediments. He was one of four people who originally designed USGS' successful National Water Quality Monitoring Assessment. He has advised and mentored students and postdoctoral associates from Asia, Europe, Latin America and North America. He is presently serving as a William J. Fulbright Distinguished Scholar studying "International approaches to applying best available science in water pollution issues" in collaboration with colleagues at the Natural History Museum in London.

Michael J. McFarland

Dr. Michael McFarland, PE, DEE is currently an associate professor in the Department of Civil and Environmental Engineering at Utah State University where his research interests are focused in the areas of biosolids engineering, industrial waste management and pollution prevention. Dr. Michael J. McFarland received his Bachelors' degree in Engineering and Applied Science from Yale University, his Masters' degree in Chemical Engineering from Cornell University, his Ph.D. in Agricultural Engineering from Cornell University and completed his postdoctoral research program in the Dept. of Civil and Environmental Engineering at the University of Texas at Austin. Dr. McFarland has served on numerous federal, state and local environmental engineering and public health advisory committees for the U.S .Dept. of Defense, U.S. Environmental Protection Agency, U.S Dept. of Energy, National Science Foundation and the state of Utah.

Robert E. Pitt

Dr. Robert Pitt is the Cudworth Professor of Urban Water Systems in the Department of Civil and Environmental Engineering at the University of Alabama. He is also Director of the UA interdisciplinary Environmental Institute. He received a B.S. in Engineering Science from Humboldt State University, an M.S. in Civil Engineering from San Jose State University, and was awarded a Ph.D. in Civil and Environmental Engineering by the University of Wisconsin - Madison. From 1971 to 1979 he was a Senior Engineer with URS Research Co. and with Woodward Clyde Consultants; from 1979 to 1987 he was a private consultant and also an Environmental Engineer with the Wisconsin Department of Natural Resources. From 1987 to 2001, he was a Professor and founding Director of the Environmental Health Engineering program at the University of Alabama in Birmingham and had joint appointments with the Schools of Engineering and Public Health. He has been at the Tuscaloosa campus of the University of Alabama since 2001. His teaching and research interests include the fates and effects of hazardous materials lost during transportation accidents and associated contingency planning, analytical methods to detect sources of contaminants in urban drainage systems, development of new analytical methods for the rapid and sensitive detection of toxicants, sources of pathogens in urban areas, modeling of urban infrastructure systems, development of stormwater control technologies, modifications of soil structure due to urbanization, and the integration of hydrology and water quality objectives in drainage design. He has published more than 100 publications, including journal articles, research reports, and several books. He received a Distinguished Service Citation from the University of Wisconsin, was a member of the project team that received a first place national award for a combined sewer project from the Water Environment Federation, and has received several outstanding teacher and volunteer service awards. He is a registered Engineer and a Diplomate of the American Academy of Environmental Engineers. He has also served on numerous professional committees in the U.S. and abroad.

Douglas Splitstone

Douglas E. Splitstone is Principal of Splitstone & Associates. With Michael Ginevan, he is the author of Statistical Tools for Environmental Quality Measurement - published by CRC Press, in 2004. He has designed data collection programs to investigate potential environmental impacts in air, water, and soil. Mr. Splitstone has conducted statistical analyses of data related to the extent of site contamination and remedial planning, industrial wastewater discharges, and the dispersion of airborne contaminants. Mr. Splitstone has also developed statistical decision criteria for evaluating when acceptable environmental cleanup levels have been achieved. He has successfully employed geostatistical analysis and estimation techniques for mapping the areal extent and total volume of dioxin contaminated soils at the site of a former New Jersey pesticide plant. He has also successfully employed these techniques to map the extent of contamination in the sediments of the Passaic River and design the sampling plan for the collection of data to assess the extent of possible contamination by radioactive material in the environs of Department of Energy's (DOE's) Feed Materials Production Center near Fernald, Ohio. He has served as a member of the Task Group on Epidemiology and Statistical Methodology for the USEPA's Center for Environmental Epidemiology at the University of Pittsburgh's Graduate School of Public Health; and previously consulted with Science Advisory Board's Air Toxics Monitoring Subcommittee, and panels on Quality Management and Secondary Data Use. Mr. Splitstone is a member of the American Statistical Association (ASA) and is a founder and past chairman of that organization's Committee on Statistics and the Environment. He was awarded the Distinguished Achievement Medal by the ASA's Section on Statistics and the Environment in 1993. He was chairman for the Sixth Symposium on Statistics and the Environment that was held at the National Academy of Sciences Mr. Splitstone received his M.S. in Mathematical Statistics from Iowa State University in 1967 Recent contract support has come from various environmental engineering/consulting firms.

Deborah Swackhamer

Dr. Deborah Swackhamer is Professor of Environmental Chemistry in the Division of Environmental and Occupational Health, School of Public Health, and also Co-Director of the Water Resources Center, at the University of Minnesota, Minneapolis. Dr. Swackhamer holds an M.S. in Water Chemistry (1982), University of Wisconsin, Madison, Wisconsin. and a Ph.D. in Oceanography and Limnology (1985), University of Wisconsin, Madison, Wisconsin. She joined the faculty of the University of Minnesota in 1987 following postdoctoral experience at Indiana University, Bloomington. Dr. Swackhamer has studied the processes affecting the behavior and fate of persistent organic compounds including PCBs, dioxins, and pesticides in the Great Lakes for the past 20 years, including sediment accumulation, source determinations, water column processes, and food web bioaccumulation. She continues to study the process of bioaccumulation in lower trophic levels, and is the Principal Investigator for the Great Lakes Fish Monitoring Program of the US EPA Great Lakes National Program Office. Currently, her research has expanded to include exposures and impacts of endocrine disruptors in aquatic systems. She also is developing and validating chemical indicators of ecological condition for coastal zones of the Great Lakes. Dr. Swackhamer has been active in numerous professional societies, including the Environmental Division of the American Chemical Society, the Society of Environmental Toxicology and Chemistry, and the International Association of Great Lakes Research. She served as Chair of the Committee on Drinking Water Contaminants for the Water Science and Technology Board, National Research Council, National Academy of Sciences from 1998-2002; Co-Chair, Gordon Research Conference, Environmental Sciences: Water, June 23-28, 2002, New Hampton, NH.; and is currently a Member of the Science Advisory Board of the International Joint Commission of the US and Canada and Chair of the Emerging Issues Work Group. She also is a member and Chair of the Great Lakes Environmental and Molecular Sciences Center Technical Advisory Board, Western Michigan University, Kalamazoo, MI and a member of the Science Advisory Board of the National Undersea Research Program for the North Atlantic and Great Lakes, NOAA.

Louis J. Thibodeaux

Dr. Louis Joseph Thibodeaux is currently the Jesse Coates Professor in the Gordon A. and Mary Cain Department of Chemical Engineering, College of Engineering, Louisiana State University, Baton Rouge, LA. His terminal degree is a Ph.D.in chemical engineering and presently his teaching, research and service is dominated by the field of environmental chemodynamics. Another name is chemical fate and transport in multimedia compartments of the natural environment. Current areas of research expertise include chemical release processes to water from sediment beds and to air from soil-like dredged materials as well as chemical releases to water and air from environmental dredging activities. The key area of educational expertise is the textbook entitled: ENVIRONMENTAL CHEMODYNAMICS in its 2nd Edition, published by J. Wiley(NY) in 1996. It is used by practitioners worldwide and by numerous universities in engineering, environmental chemistry, geosciences and other environment oriented academic departments. Although he is the Emeritus Director of the USEPA funded South and Southwest Hazardous Substance Research Center, headquartered at LSU and Directed by Danny D. Reible, Professor Thibodeaux has served on advisory committees for the USEPA, USACE, DOD, DOE, NRC and the private sector; all being related to environmental chemodynamic issues. He is a member of the Env. Div. of the Amer. Chem. Soc., Society of Env. Tox. and Chemistry and the Env. Div. of the Amer. Inst. Chemical Eng. Professor Thibodeaux is fully employed by LSU doing research and teaching both graduate and undergraduate students. He also serves on the editorial board of several environmental journals and is presently receiving grant and/or contract support on four research projects from the USEPA and the USACE. Through the cooperative agreement USEPA/LSU in the S/SW Haz Res. Ctr., ORD Wash, DC. he receives research project funds. He also receives research funds from the US Army Corp. Engineers; the group is ERDC or Waterway Experiment Station, Vicksburg, MS. objectives; Developing methods and tools for watershed restoration design, implementation, and assessment in the Willamette Basin, Oregon).